CLAIMS

1. A refrigeration appliance, characterized in that it comprises: a cabinet (10) defining a refrigerating compartment (RC) provided with at least one front door (14) and an air refrigerating chamber (15); refrigerating and freezing air supply ducts (40, 50), each having an inlet opening (41, 51) in communication with the air refrigerating chamber (15) and a plurality of outlet openings (42, 52) in communication with the refrigerating compartment (RC); a valve (70) provided in each outlet opening (42, 52) for providing the closing and the selective opening of the latter; refrigerating and freezing air return ducts (80, 90), each having at least one inlet window (81, 91) opened to the interior of the cabinet (10) and an outlet window (82, 92) opened to the air refrigerating chamber (15); at least one evaporator (20) and at least one fan (30) are provided in the air refrigerating chamber (15), said fan (30) producing a forced refrigerated air flow through the evaporator (20) and through the refrigerating and freezing air supply ducts (40, 50) to be directed to the interior of the cabinet (10); and at least one freezing compartment (FC) provided with a respective front door (61) and which is optionally and selectively mounted inside the cabinet (10), in order to occupy a respective portion of the inner volume of the latter and to be maintained in fluid communication with at least one outlet opening (52) of a freezing air supply duct (50) and with at least one inlet window (91) of a freezing air return duct (90).

2. The appliance as set forth in claim 1, characterized in that the mounting of a freezing compartment (FC) in the interior of the cabinet (10) blocks the outlet opening (42) of a refrigerating air

supply duct (40) which is directed to the region of the cabinet (10) occupied by said freezing compartment (FC).

3. The appliance as set forth in claim 1, characterized in that the evaporator (20) is divided into two portions (20a, 20b), one of them (20a) receiving the forced air flow to be directed to at least one refrigerating air supply duct (40), while the other evaporator portion (20b) receives the air flow to be directed to at least one freezing air supply duct (50).

4. The appliance as set forth in claim 3, characterized in that it comprises two fans (30), each operatively associated with one of the two portions (20a, 20b) of the evaporator (20), the operation of each fan (30) allowing to control the air flow to the refrigerating compartment (RC) and freezing compartment (FC).

5. The appliance as set forth in claim 4, characterized in that the fans (30) are driven by variable speed motors.

6. The appliance as set forth in claim 1, characterized in that the cabinet (10) has inner walls limiting the refrigerating compartment (RC), the freezing compartment (FC) being dimensioned and mounted in the interior of the cabinet (10) so as to define, in relation to the inner walls of the latter, a gap which is sufficient to allow the air to circulate between said parts.

7. The appliance as set forth in claim 1, characterized in that any freezing compartment (FC) is dimensioned in modular form in at least one size, so that it can form a plurality of freezing compartments (FC) occupying at least one portion of the height and practically the whole inner width of the cabinet (10).

8. The appliance as set forth in claim 7, characterized in that the freezing compartment (FC) is defined by a box (60) provided with a front door (61), said box (60) presenting a height corresponding to the integer fraction of the maximum height of the refrigerating compartment (RC) and a width which is slightly inferior to the inner width of the cabinet (10).

9. The appliance as set forth in claim 1, characterized in that the box (60) has an air inlet hole (62) to be aligned with a respective outlet opening (52) of the freezing air supply duct (50) and an air outlet hole (63) to be aligned with a respective inlet window (91) of the freezing air return duct (90).

10. The appliance as set forth in claim 1, characterized in that it comprises a refrigerating air supply duct (40) and a freezing air supply duct (50) which are vertically positioned side by side along the inner wall of the cabinet (10), the respective outlet openings (42, 52) of both ducts being disposed in laterally adjacent pairs, each pair being provided with a single valve (70) constructed so as to simultaneously close one of the openings of one pair and open the other opening of the same pair.

11. The appliance as set forth in claim 10, characterized in that the valve (70) of each pair of outlet openings (42, 52) is actuated, to one and to the other of its two operational conditions, upon the mounting and the removal of the respective freezing compartment (FC) in relation to the cabinet (10).

12. The appliance as set forth in claim 11, characterized in that the valves (70) are constantly forced to the operational position in which they close the respective outlet openings (52) of the freezing

air supply duct (50) and open the respective outlet openings (42) of the refrigerating air supply duct (40).

13. The appliance as set forth in claim 1, characterized in that the inlet windows (91) of the freezing air return duct (90), which are directed to the regions of the cabinet (10) that define a refrigerating compartment (RC), are blocked by a selectively removable obturator (95), allowing said inlet windows (91) of the freezing air return duct (90) to be directed to the interior of the freezing compartment (FC).

14. The appliance as set forth in claim 1, characterized in that the refrigerating air return duct (80) is in the form of an air passage provided through a dividing wall (18) disposed between the air refrigerating chamber (15) and the interior of the cabinet (10).